was 120 mm. of mercury systolic and 85 mm. diastolic; with the patient standing, 140 mm. and 100 mm. respectively. The slight hypertension which has persisted is probably secondary to the renal damage which occurred prior to the removal of the pheochromocytoma.

DISCUSSION

In most exploratory operations for adrenal tumors of this type, a posterolumbar incision has been used. The bilateral posterolumbar incision described by Young has been employed at times when the location of the tumor was uncertain before operation and when a tumor was not found associated with the adrenal gland first exposed. Other surgeons have preferred to perform the adrenal exploration transperitoneally through an incision in the anterior abdominal wall. Brunschwig, Humphreys and Roome[2] favor the anterior abdominal incision for the following reasons: "(1) Multiple tumors may be present, (2) There may be congenital absence of one adrenal gland, (3) Where, as in some reported instances, the tumor is on the anterior aspect of the kidney and adherent to surrounding tissues, sparing this kidney would be more feasible from an anterior approach than through a lumbar incision." Pneumoretroperitoneography for localization of the tumor is not without hazard and has not been used in many of the successfully treated cases. If localization of the tumor is not possible before operation, bilateral adrenal exploration is more readily performed through an anterior abdominal incision.

The benzodioxane test has been accepted in recent years as a relatively successful diagnostic procedure in cases in which pheochromocytoma is suspected. The efficacy of this drug was demonstrated in this case, not only in diagnosing the original condition, but also as a postoperative test to confirm the successful removal of the entire tumor. This drug has been employed as a diagnostic aid in examination of hypertensive patients at this hospital. No ill effect of the drug was observed in these studies. Drill[3] reported one case of nausea and headache and one in which precordial pain was noted following the use of the drug. The use of histamine injection as a diagnostic procedure is also considered to be hazardous because of the pronounced increase in blood pressure which may occur. Consequently, other drugs, such as tetraethylammonium bromide, are recommended in view of the fact that the blood pressure rise can be more easily controlled by postural changes.[6] The case described in this report again emphasizes the recessibility of many of the effects of a persistent elevated blood pressure, as is demonstrated by the pronounced improvement of the eyegrounds, in kidney function and in electrocardiogram tracings. Similar improvement has been noted by others (Bruce, Brunschwig, Kvale).

SUMMARY

A case of pheochromocytoma in a 37-year-old male who had typical attacks of paroxysmal hypertension, is reported. The diagnosis was confirmed by the use of benzodioxane and histamine tests.

A transverse upper abdominal incision was found to give adequate exposure for bilateral exploration of the adrenal glands and removal of the tumor.

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Dermoid Cyst of the Omentum

With Report of a Case

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IN a recent article dealing with omental cysts of clinical importance, Beahrs and Dockerty reviewed the literature on omental tumors and added 14 previously unreported cases of omental cysts. They divided omental tumors into solid and cystic. The cystic outnumbered the solid tumors in a ratio of 4 to 1. The malignant solid liposarcomas and fibrosarcomas were more frequent than the benign lipomas. Cysts of the omentum were subdivided into pseudocysts and true cysts. As examples of pseudocysts they cited cystic lesions following fat necrosis, those forming at the site of trauma with hematoma, those caused by reaction about a foreign body (such as gauze or petrolatum) and, most common, hydatid cysts. The true cysts were usually lined with epithelium or endothelium. Dermoid cysts, of which perhaps a dozen have been reported in the literature, were said to be examples of the epithelium-lined true cysts. Cysts which are probably congenital lymphangiomas but which might be the result of imperfect fusion of the opposed omental surfaces were cited as typical endothelium-lined cysts. Beahrs and Dockerty pointed out that the fewer than 100 cases of omental cysts in the literature probably did not represent the true incidence. The reported age range of patients was 3 months to 76 years, the majority of cysts occurring in the early years of life, 68 per cent among patients less than 30 years of age. Sixty per cent occurred in females. There was no racial predilection. The cysts were asymptomatic or the symptoms were caused by the size of the lesion, rupture of the cyst or torsion of the pedicle.

The following report of a case of dermoid cyst of the omentum is presented because the patient was older than any previously reported, because of the acute symptoms that were present owing to torsion and infarction, and because of the clinical and roentgenologic observations.

A 78-year-old white woman was admitted to the San Diego County General Hospital with a four-day history of shooting pain in the lower abdomen. The pain was intermittent but recurred with increasing frequency and severity. Marked anorexia developed on the day of entry. The

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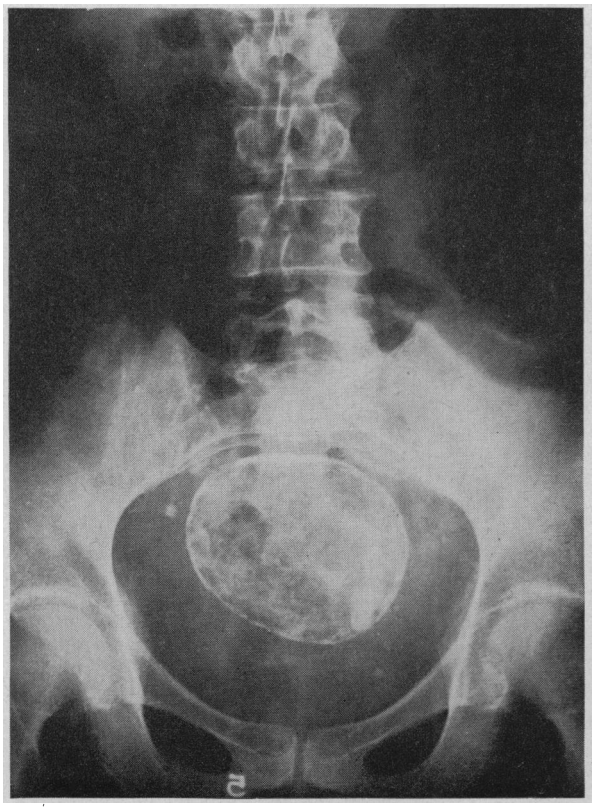

Figure 1.—Roentgen appearance of dermoid cyst of the omentum.

patient had not had similar attacks previously. There were no other symptoms referable to the gastrointestinal or genito-urinary tracts. Heart disease of long standing had responded well to treatment.

The temperature was 99.6° F., the pulse rate 100, and respirations 28 per minute. The blood pressure was 200 mm. of mercury systolic and 110 mm. diastolic. The abdomen was protuberant and soft with some voluntary guarding and spasm in the lower two-thirds where there were generalized tenderness and rebound tenderness. Peristalsis was hypoactive. In pelvic and rectal examinations severe pain was elicited by motion of the cervix. In a roentgenogram of the abdomen early ileus and what was interpreted as a large calcified leiomyoma ~~were~~ noted (Figure 1). A clinical diagnosis of infarcted leiomyoma of the uterus was made.

At operation a hard, purplish-red tumor, 10 cm. in diameter, was observed. It contained areas of necrosis and was surrounded by fresh adhesions. The tumor arose from the omentum and lay in the lower abdomen and upper pelvis. The omental pedicle had rotated through three complete turns, and was infarcted. There was no evidence of ovarian attachment. A small amount of free blood was present in the abdomen. Removed and sectioned, the tumor was observed to be a hair-filled dermoid cyst of the omentum with a heavily calcified wall.

The postoperative course was uneventful. The patient was discharged asymptomatic and ambulatory on the sixth postoperative day.

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Bronchiogenic Cysts

A Report of Two Cases

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AGE extremes for bronchiogenic cysts are well illustrated by the following two case reports, which are considered to be of special interest in that they show some variation in clinical manifestations and anatomical location. Although the lesion is relatively rare, several series of cases have been reported. In 1945, Laipply[2] reported a total of 35 cases collected from the literature. The following year, Blades[1] reported upon an additional 23 cases of bronchiogenic cysts observed in army hospitals, and several small series have been reported since.

These cysts usually arise at or near the tracheal bifurcation. Embryologically, the primitive foregut divides longitudinally, forming the trachea anteriorly and the esophagus posteriorly. Cyst formation is most frequent at the lowest point of division. Histologically, the cyst usually contains elements of the bronchial wall; however, gastric or esophageal derivatives may be present. Cyst formation is thought to be due to the pinching off of a diverticulum at the carinal level or more distally along the main stem bronchi as development proceeds. Due to variations in growth, cysts may be solely mediastinal in position or intimately associated with the fissures or lung parenchyma.

Bronchiogenic cysts are usually detected on routine chest x-rays, for they seldom produce symptoms sufficient to cause the patient to seek medical aid. The principal clinical symptom, if any is present, is dull substernal pain, with or without cough. Wheezing or dysphagia may occur if there is partial obstruction of the trachea or esophagus. Cysts adjacent to the carina are likely to cause these symptoms in infancy or early childhood due to compression of the soft tracheal rings or impingement of the esophagus against the vertebrae. Such severe symptoms are seldom present if the cyst is located farther along a main stem bronchus. With severe bronchial compression, symptoms of atelectasis and pneumonia may ensue. The presence of infection may also indicate the existence of a bronchial communication; the symptoms characteristic of lung abscess or other pulmonary infection would then occur.

In posterior-anterior x-ray films a bronchiogenic cyst appears as a rounded, fairly sharply circumscribed area of increased density near the midline, usually in the vicinity of the hilum. Such lesions are more often on the right side than on the left (Figures 1 and 2). A bronchial communication with the cyst, which is rare, may permit air to enter and, at times, show a fluid level. In the lateral x-ray view the cyst is usually seen in the central mediastinum, either posterior or anterior to the trachea (Figures 1 and 2). If the lesion is large, compression of contiguous structures

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